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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,556

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EXAMINER

WANG, KENT F

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/808,556

Applicant(s)

SUZUKI ET AL.

Examiner

Kent Wang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendments, filed on 09/17/2007, have been entered and made of record. Claims 9-10 have been cancelled. Claims 1-8 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the interpretation of the original cited references.
 - The applicant argues that Takahashi does not disclose or suggest at least specifying a color temperature of a light source on the basis of correction values corresponding to respective skin colors of persons, registered on a person basis, an output signal of an image device within an instructed area and a correction value corresponding to a skin color of a selected person, as well as conducting white balance processing in accordance with a white balance coefficient that corresponds to the specified color temperature of the light source, as is recited in independent Claims 1 and 8. The examiner understands the applicant's arguments but respectfully disagrees with the applicant's assessment. Takahashi specifically teach a white balance processing unit (white balance correction apparatus 10, Fig 1) that specifies a color temperature of a light source on the basis of correction values (optimizes the coefficients α_1 and α_2) corresponding to respective skin colors of persons (skin color candidate detection section 18, Fig 1), registered on a person basis, an output signal of the image device within the instructed area and a correction

value corresponding to a skin color of a selected person (skin color is vary considerably with respect to human race, i.e. white race, yellow-skinned race, and black race, [0076]), and conducts white balance processing in accordance with a white balance coefficient (coefficients α_1 and α_2) that corresponds to the specified color temperature of the light source (the coefficient optimization section counts the number of gray candidate pixels detected by the gray candidate detection section, and optimizes the coefficients).

- The applicant argues that Shimizu and Wheeler are not believed to remedy the deficiencies of Takahashi note above with respect to Claims 1 and 8. The examiner understands the applicant's arguments but respectfully disagrees with the applicant's assessment. However, examiner believed that Shimizu explicitly teaches a camera that utilizes a color tone adjusting mode, with a guide for adjusting a color tone being shown on a monitor and one-push white balance can be performed on a particular area designated in an image screen and Wheeler further teaches voice-actuated input in a camera. Thus their citations are believed to remedy the deficiencies of Takahashi noted above with respect to the independent claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-6, and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi, US 2003/0090750 in view of Shimizu, US 6,862,039.

Regarding claim 1, Takahashi discloses an image pickup device (a digital still camera, DSC; [0052]) comprising:

- an image device (Fig 3 shows spectral sensitivity distributions of a typical CCD sensor, see [0057]);
- a white balance processing unit (white balance correction apparatus 10, Fig 1) that specifies a color temperature of a light source (the color temperature of the photographing light source estimated by the light source color temperature estimation device 12) on the basis of correction values (optimizes the coefficients α_1 and α_2) corresponding to respective skin colors of persons (skin color candidate detection section 18, Fig 1), registered on a person basis, an output signal of the image device within the instructed area and a correction value corresponding to a skin color of a selected person (skin color is vary considerably with respect to human race, i.e. white race, yellow-skinned race, and black race, [0076]), and conducts white balance processing in accordance with a white balance coefficient (coefficients α_1 and α_2) that corresponds to the specified color temperature of the light source (the coefficient optimization section 22 counts the number of gray candidate pixels detected by the gray candidate detection section 20, and optimizes the coefficients) (see step 220 of Fig 7 and [0074], [0076]-[0080], Takahashi).

Takahashi does not disclose an instruction unit that instructs a given chromatic color area on a photography screen.

Shimizu discloses an instruction unit that instructs a given chromatic color area on a photography screen (pre-setting and one-push white balance wherein a particular area is

designated in a captured image screen) (see Fig 1, Fig 2, col. 2, lines 6-10, and col. 4, lines 32-56).

Takahashi and Shimizu are analogous art because they are from the same field of endeavor of white balance adjustment of an imaging pickup device. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Shimizu's instruction unit in Takahashi's method and apparatus for correcting white balance. The suggestion/motivation would have been to enable the operator to finely adjust the color tone of a subject (see col. 1, line 61 to col. 2 line 10).

Regarding claim 2, Takahashi discloses the white balance processing unit (10) calculates color evaluated values on the basis of the output signal of the image device (CCD sensor) within the instructed area, and specifies the color temperature of the light source on the basis of a color evaluated value that is judged to be included in a predetermined chromatic color detection area among the calculated color evaluated values (the light source color temperature computation section 24 computes the estimated value of the color temperature of the photographing light source from the average color temperature of the group of skin color candidate pixels) ([0099] and [0100]) (also see [0018] for a predetermined chromatic color detection area).

Regarding claim 3, Takahashi discloses an image pickup device wherein the chromatic color is a skin color ([0020] and [0076]).

Regarding claim 4, Takahashi discloses the chromatic color detection area is generated on the basis of a difference between a color evaluated value of a predetermined skin color which corresponds to the color temperature of the photography light source (provide a

method for density correction which is a technique for detecting an area of skin color out of an image to obtain an appropriate print density; [0018]) (estimating a color temperature of a photographing light source with which the color image has been taken and correcting image signals of the color image based on the estimated color temperature; [0019]).

Regarding claim 5, Takahashi does not explicitly disclose an instruction unit comprises one of a touch panel and a visual line input. Shimizu discloses an instruction unit comprises one of a touch panel (monitor 30) and a visual line input (function selection button 36 and decision button 38) (see col. 3, lines 29-33 and col. 4, lines 32-55).

Regarding claim 6, Takahashi discloses an image pickup device wherein the chromatic color detection area is selected from a plurality of areas (provide a method for density correction which is a technique for detecting an area of skin color out of an image to obtain an appropriate print density based on information on the area of skin color, in other word the area is selected from a plurality of areas) ([0018]).

Regarding claim 8, Takahashi discloses a white balance processing method (white balance correction apparatus 10, Fig 1) comprising:

- specifying a color temperature of a light source on the basis of correction values (optimizes the coefficients α_1 and α_2) corresponding to respective skin colors of persons (skin color candidate detection section 18, Fig 1), registered on a person basis, an image signal within the instructed area and a correction value (coefficients α_1 and α_2) corresponding to a skin color of a selected person (skin color is vary considerably with respect to human race, i.e. white race, yellow-skinned race, and black race) (see step 220 of Fig 7 and [0076]-[0080], Takahashi); and

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- conducting white balance processing in accordance with a white balance coefficient that corresponds to the specified color temperature of the light source (the coefficient optimization section 22 counts the number of gray candidate pixels detected by the gray candidate detection section 20, and optimizes the coefficients) (see [0074]).

Takahashi does not disclose instructing a display device displays an image and a given chromatic color area of the image on the display device.

Shimizu discloses instructing a display device displays an image and a given chromatic color area of the image on the display device (step S108 of Fig 3) (see Fig 3 and col. 4, lines 32-56).

5. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of Shimizu, and further in view of Wheeler, US 7,133,070.

Regarding claim 7, Takahashi as modified by Shimizu does not disclose the chromatic color detection area is selected on the basis of an input language that is inputted to the image pickup device by a photographer.

Wheeler discloses an input language (voice-actuated input) that is inputted to the image pickup device (a digital camera 300) by a photographer (the photofinisher) (see col. 13, line 51 to col. 14, line 6 and figure 8, Wheeler).

Takahashi, Shimizu, and Wheeler are analogous art because they are from the same field of endeavor for white balance processing in an image pickup device. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Wheeler's voice-actuated input in Takahashi and Shimizu's device for image processing. The

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suggestion/motivation would have been to enable the instruction unit to accept instructions by a variety of means (col. 11, lines 25-58, Wheeler).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KW

27 October 2007



NGOC-VEN VU
SUPERVISORY PATENT EXAMINER